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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/061,305	02/04/2002	Ryosuke Kosaka	8023-1001	2358

466 7590 06/21/2004  
YOUNG & THOMPSON  
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ARLINGTON, VA 22202

EXAMINER

LEFLORE, LAUREL E

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/061,305

Applicant(s)

KOSAKA, RYOSUKE

Examiner

Laurel E LeFlore

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1 and 8 recite "picture data between two consecutive horizontal periods" and claim 15 recites "picture data from a last horizontal period before a current horizontal period" and "comparing the picture data from the last horizontal period with a picture data to be next displayed during the current horizontal period". However, the specification as originally filed repeatedly recites "comparing a picture data before one horizontal period with a picture data to be next displayed" (see, for instance, page 4, lines 8-9 and 20-22; page 5, lines 1-3 and 7-9; and page 6, lines 1-3 and 6-8). There is no mention of consecutive horizontal periods, and picture data before one horizontal period is not equivalent in meaning to picture data in the first of two consecutive horizontal periods. Further, picture data to be next displayed also is not equivalent in meaning to picture data in the second of two consecutive horizontal periods. Picture data to be next displayed could also be interpreted as picture data of the next frame.

Thus, the recitations of newly amended claims 1 and 8 and new claim 15 constitute subject matter not properly described in the application as filed and consequently raise doubt as to possession of the claimed invention at the time of filing.

***Claim Objections***

3. Claim 16 objected to because of the following informalities: On line 9, "graduation" should be "gradation". Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nitta et al. 6,661,402 B1 in view of Usui et al. 5,844,533.
6. In regard to claims 1 and 8, see rejection of claims 1 and 8 in Paper No. 5. Nitta in view of Usui further disclose comparing, for each signal line, picture data between two consecutive horizontal periods by comparing the picture data before one horizontal period with the picture data to be next displayed in the one horizontal period. Usui et al. discloses in column 2, lines 4-15, "The liquid crystal display apparatus compares display data for the current screen with that for the immediately previous screen". The first horizontal line of the current screen and the last horizontal line of the immediately previous screen are two consecutive horizontal periods.

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7. In regard to claims 2, 3, 5-7, 9, 10 and 12-14, see rejection of claims 2, 3, 5-7, 9, 10 and 12-14 in Paper No. 5.

8. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nitta et al. 6,661,402 B1 in view of Usui et al. 5,844,533 as applied to claims 1, 8 and 9 above, and further in view of Liaw et al. 6,483,494 B1.

9. In regard to claims 4 and 11, see rejection of claims 4 and 11 in Paper No. 5.

***Response to Arguments***

10. In regard to applicant's arguments on pages 12-21 of Paper No. 6, applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection under 35 USC 112, first paragraph. Applicant argues, for instance, on page 13, first new paragraph, "The inventive signal line driving circuit applies a pre-charging voltage and a gradation voltage using a picture data comparator for comparing a picture data before one horizontal period with a picture data to be next displayed for each signal line. That is, for signal Si, the picture data comparator compares a picture data already output for G1 with a picture data to be output for G2; and, in the next horizontal time period, a picture data output for G2 with a picture data to be next output for G3, ...". However, these two sentences do not have equivalent meanings. The second sentence (beginning with "That is") describes consecutive horizontal periods being compared, which is not found in the specification as originally filed. (Also see above 35 USC 112, first paragraph, rejection.) Thus, arguments of this nature are moot.

11. Further in regard to applicant's arguments on pages 12-21 of Paper No. 6, applicant's arguments filed 3 May 2004 have been fully considered but they are not persuasive. Applicant argues that the applied art does not disclose the feature of, for instance on page 13, second new paragraph, "A signal line driving method according to the present invention compares, for each signal line, a picture data of the last horizontal period with a picture data to be next displayed." However, Usui et al. discloses in column 2, lines 4-15, "The liquid crystal display apparatus compares display data for the current screen with that for the immediately previous screen". The last horizontal line of the immediately previous screen and the first horizontal line of the current screen are a picture data of the last horizontal period and a picture data to be next displayed, for each signal line. (Also see the rejections of claims 1-14 above.)

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gyouten 6,100,867 discloses an invention in which data from consecutive scanning periods is compared and a correction voltage is applied in accordance with this comparison.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

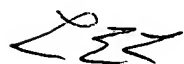
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurel E LeFlore whose telephone number is (703) 305-8627. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703) 305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LEL  
15 June 2004



BIPIN SHALWALA  
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